



NA-Tune[®] Installation Procedure

The following procedure outlines how to install the Rogue Tuning 944 NA-Tune[®] MAF kit. The procedure can be done with very basic mechanical skills and does not require any specialty tools. The kit requires a 28 pin DME. If you have a 24 pin DME you can convert your DME to a 28 pin or Rogue Tuning can do it for you (see our website www.roguetuning.com for details).



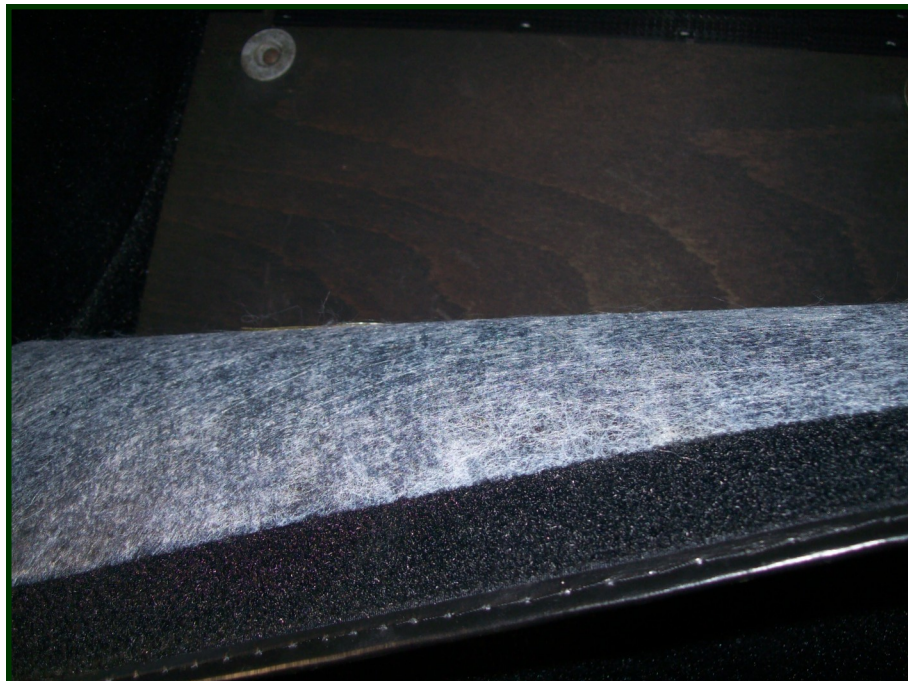
The NA-Tune Kit - The kit includes the MAF Assy and the Chip/Chip Board



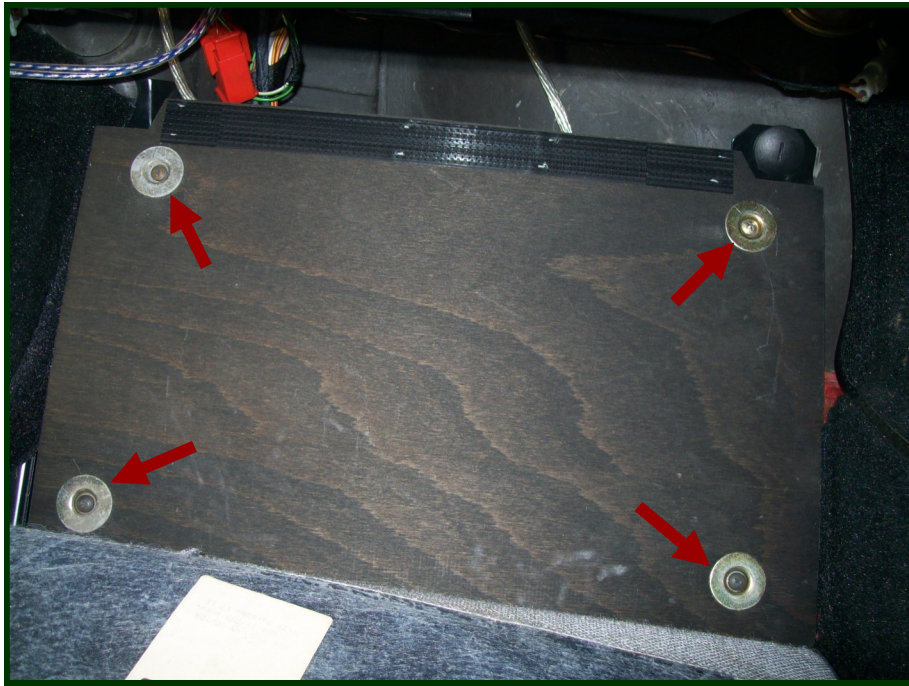
Installation - The kit can generally be installed in 1-2 hours



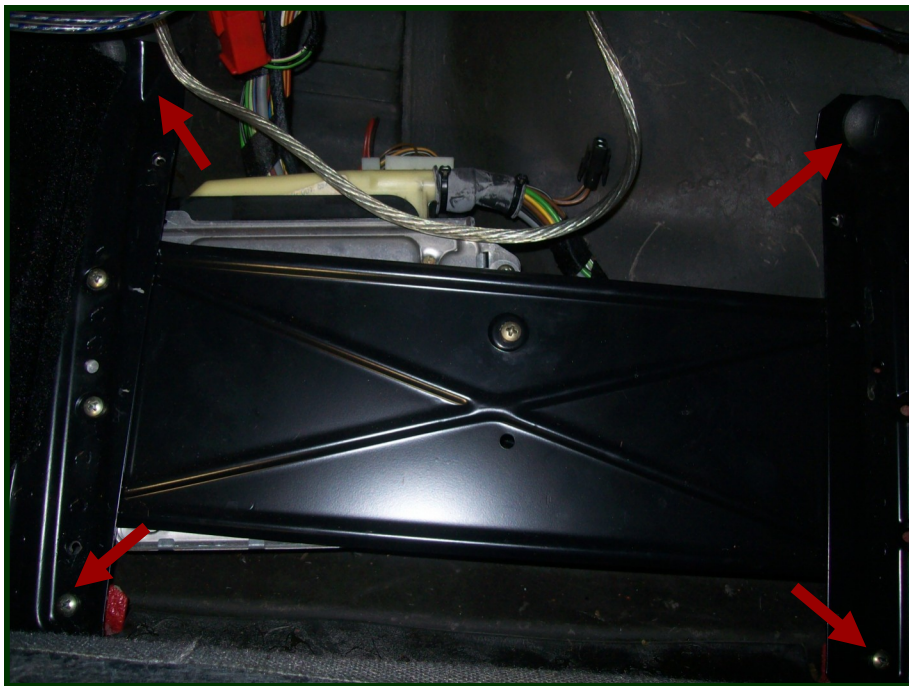
Step 1 - Start by disconnecting the negative side of the battery.



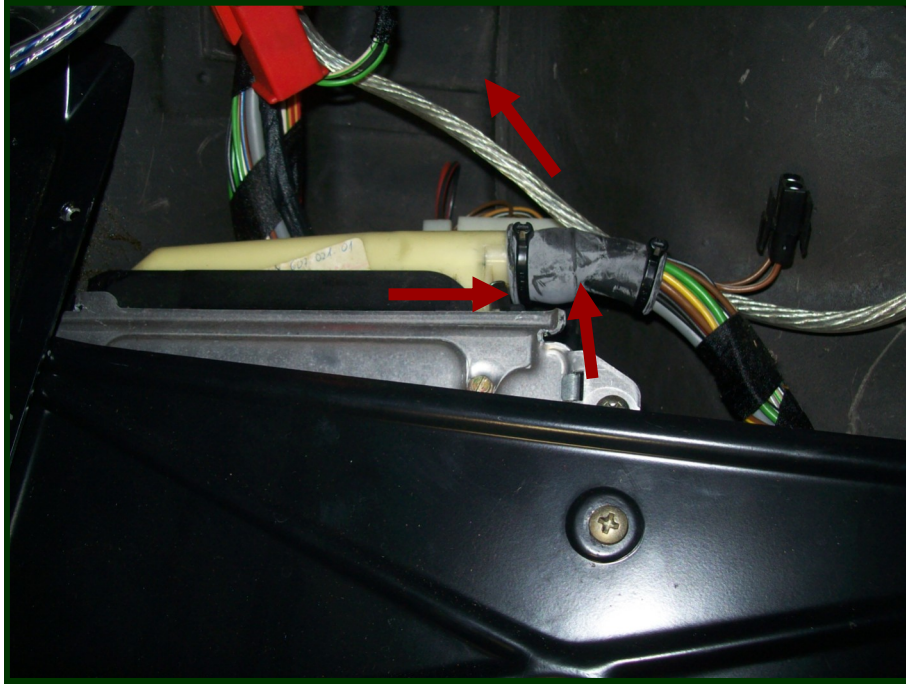
Step 2 - Pull the carpet back on the passenger side foot area as shown above.



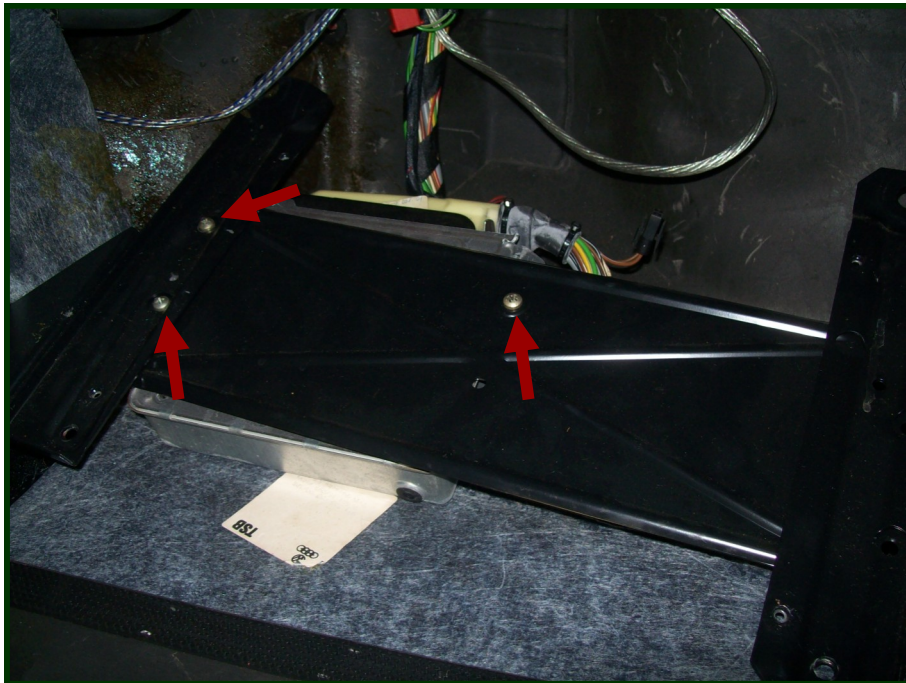
Step 3 - Remove the four screws shown above and remove the foot board.



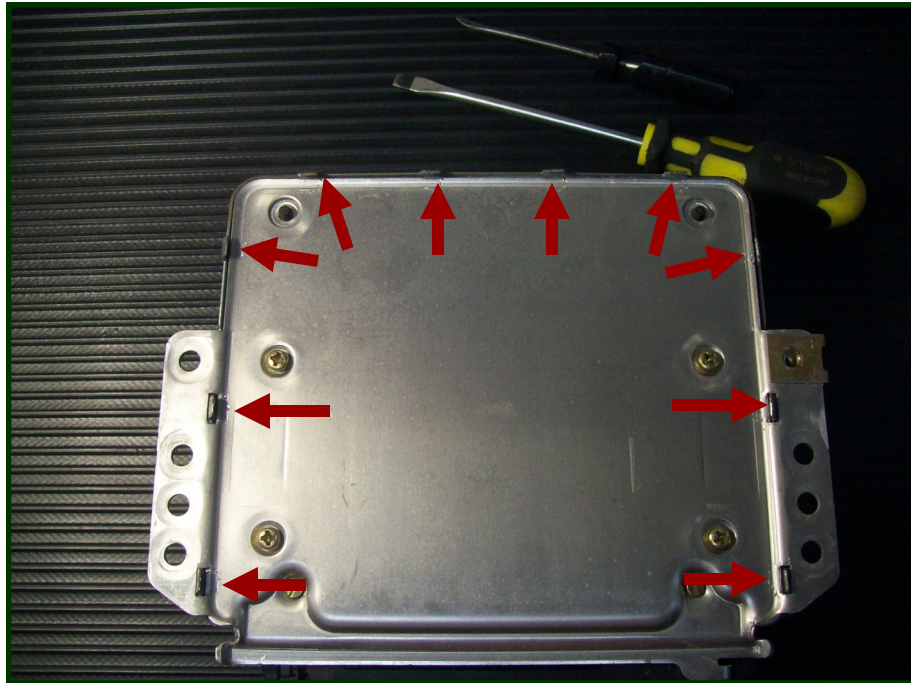
Step 4 - Remove the two screws at the bottom and the two plastic screws at the top and then pull the assembly out a bit.



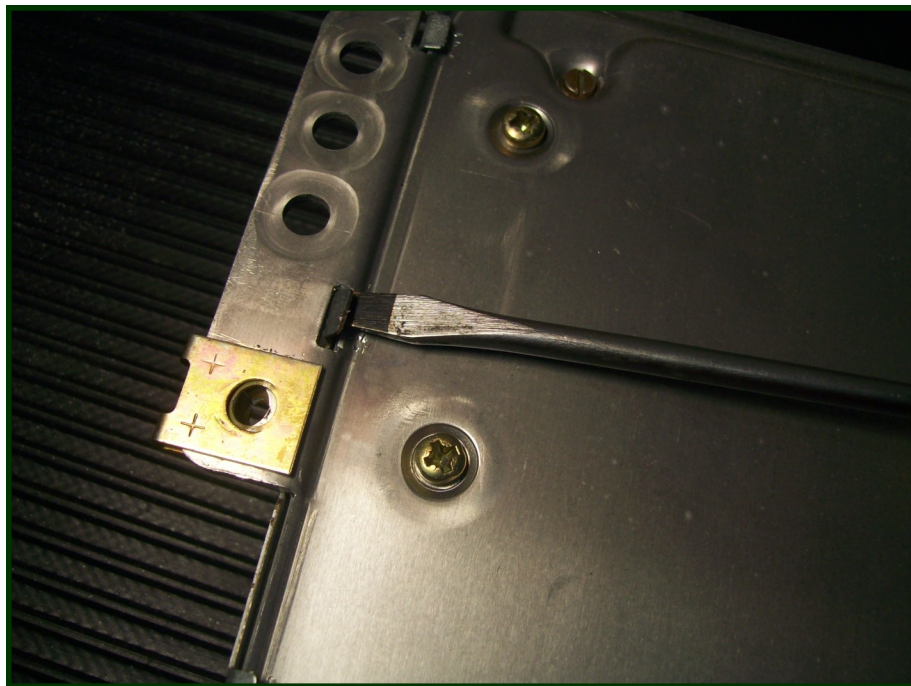
Step 5 - Push the DME connector retainer clip to the right while pushing up on the DME connector as shown above.



Step 6 - Remove the screws holding the DME to the support rack as shown above. Remove the DME from the car.



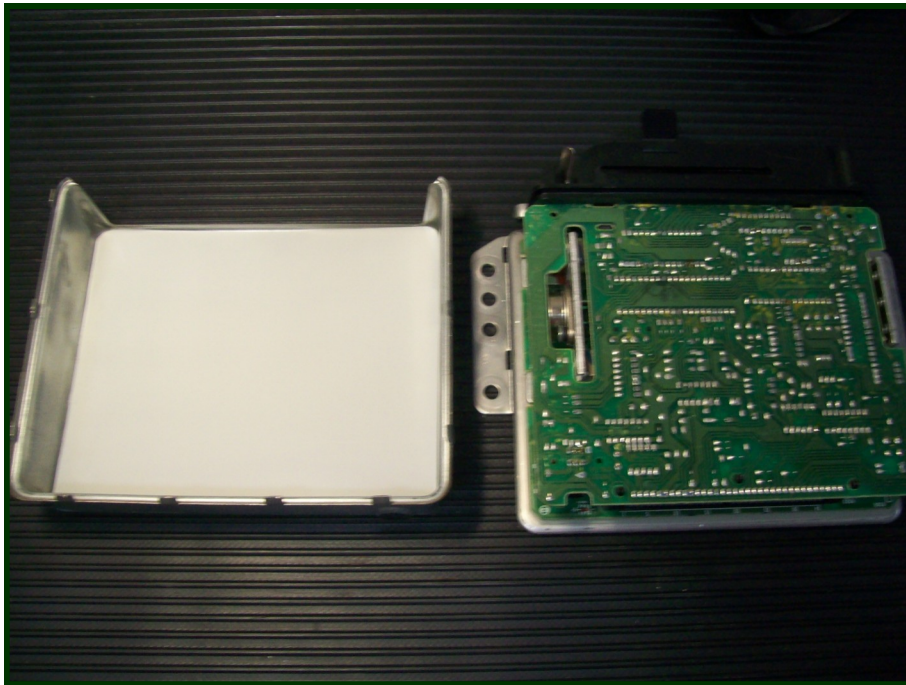
Step 7 - Lay the DME as shown above and straighten the 10 tabs in the locations indicated.



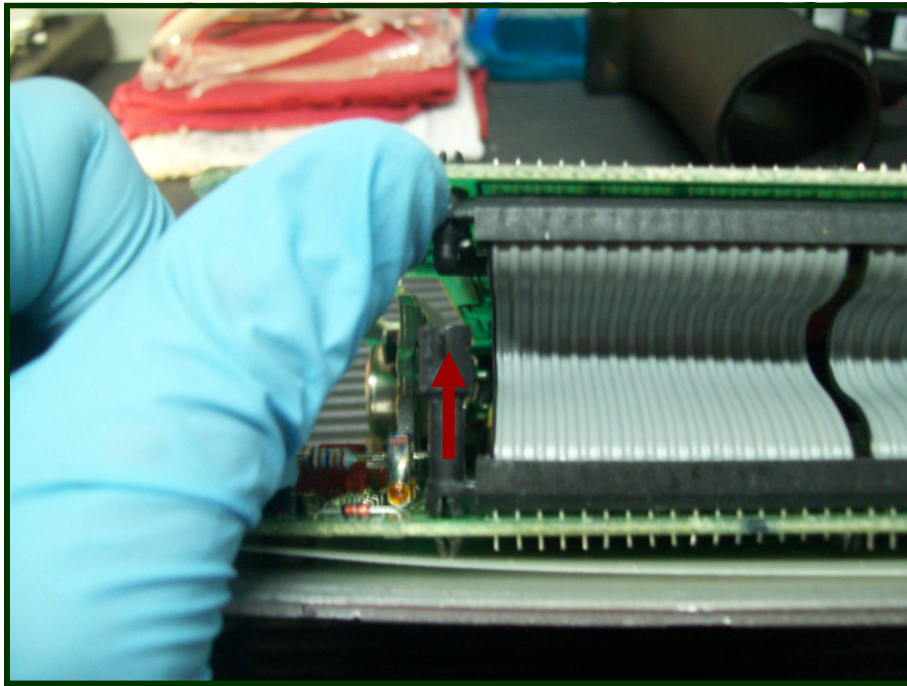
Step 8 - Using a flat head screw driver, get under the tab and bend them straight up.



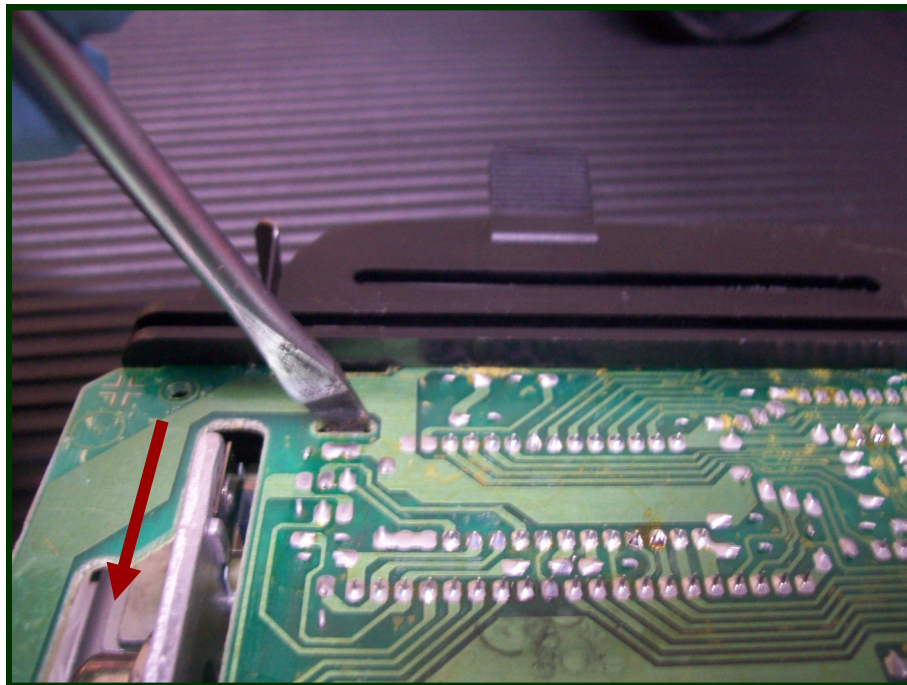
Step 9 - When handling electronic equipment it is important to protect the components from ESD (electro-static discharge). An ESD wrist strap is recommended as shown above. These wrist straps are readily available online.



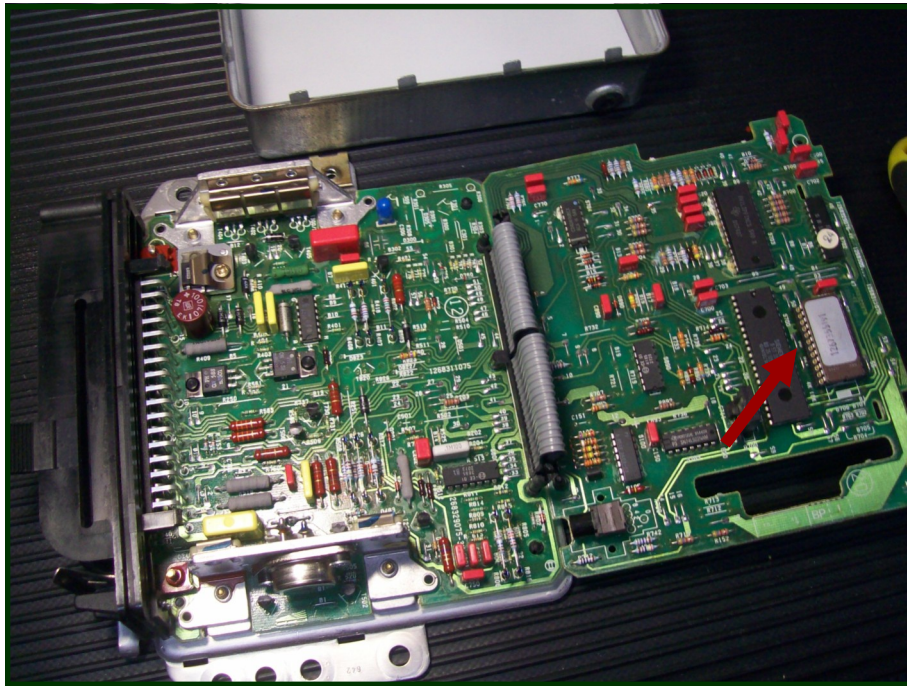
Step 10 - Remove the cover from the DME as shown above.



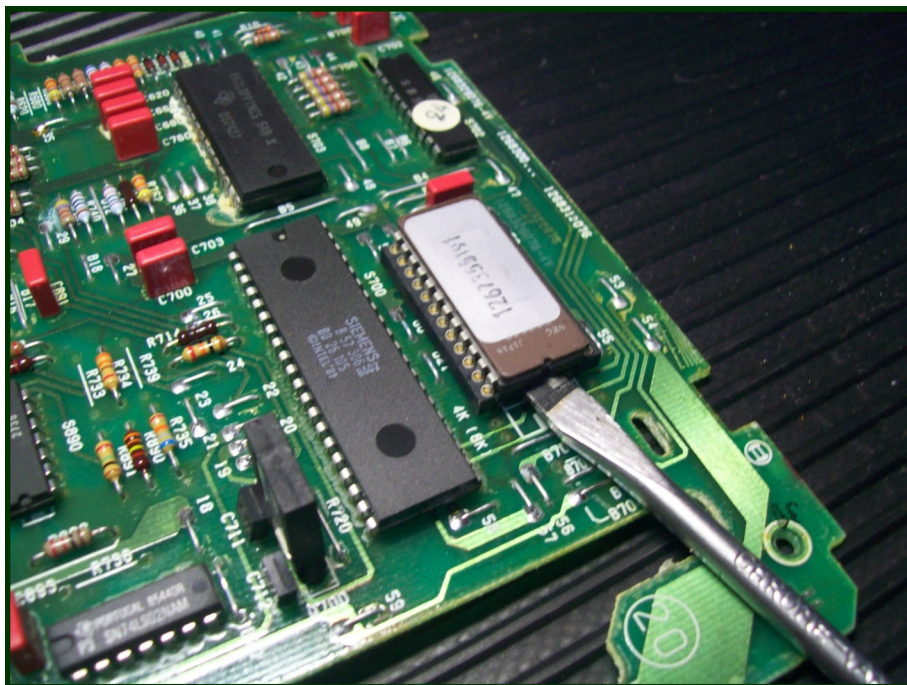
Step 11 - Separate the printed circuit boards. Use your thumbs on both sides of the connector pushing up as shown to separate the connector posts that snap together.



Step 12 - Gently push down on the "holding tabs" on each side of the top board while pulling back on the board as shown above.



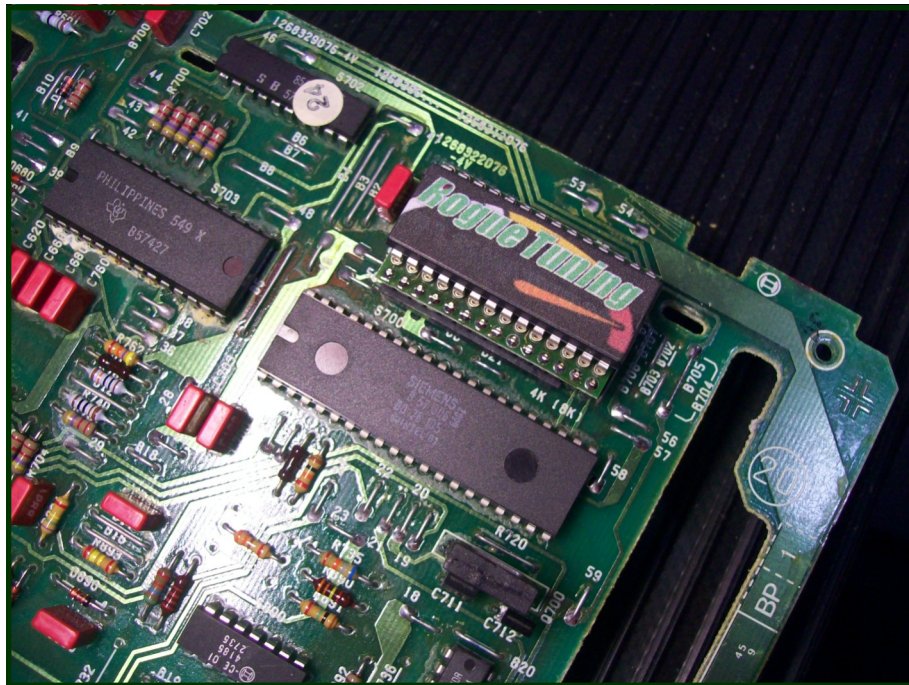
Step 13 - Open up the printed circuit boards so that the components including the DME chip are exposed as shown above..



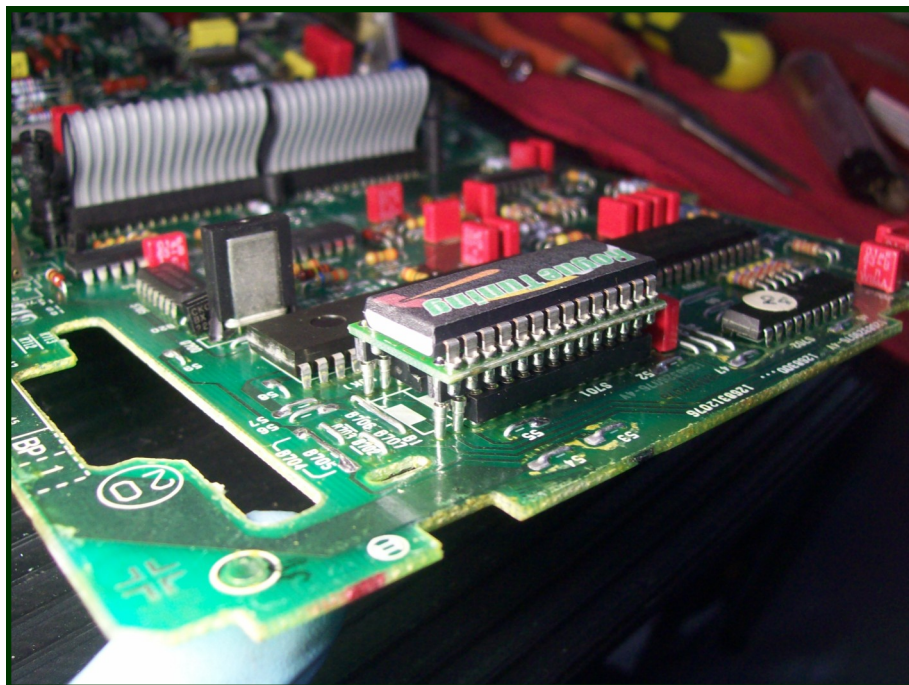
Step 14 - Remove the DME chip by using a flat head screw driver. Place the blade beneath the chip at the socket and gently rotate the blade from side to side to work the chip out of the socket. Go back and forth between the two ends of the chip to bring the chip up as evenly as possible.



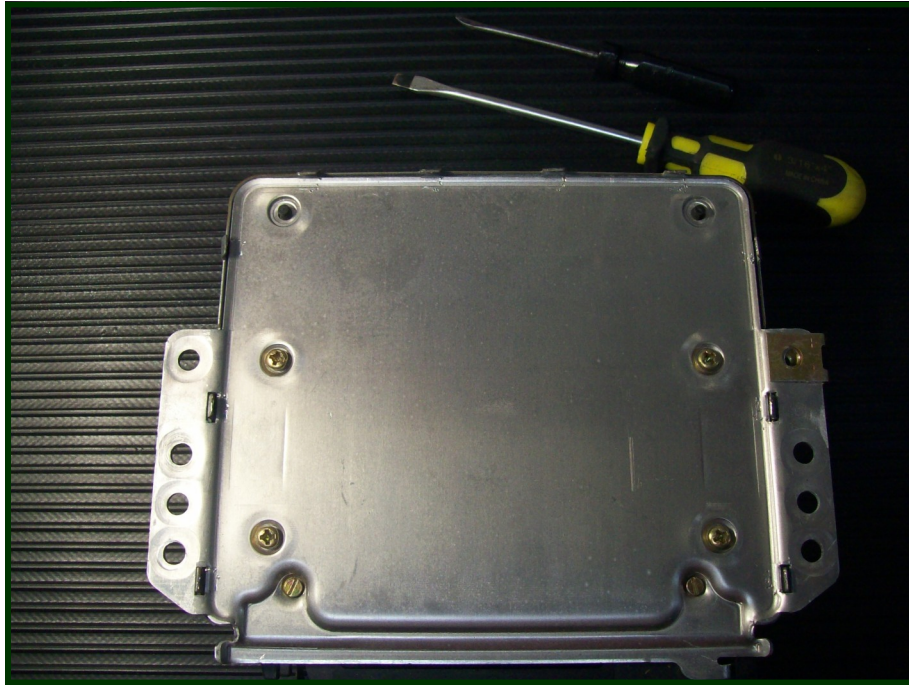
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Step 15 - Install the Rogue Tuning chip board as shown above. Notice the orientation of the chip board and make sure it is installed **EXACTLY** as shown.



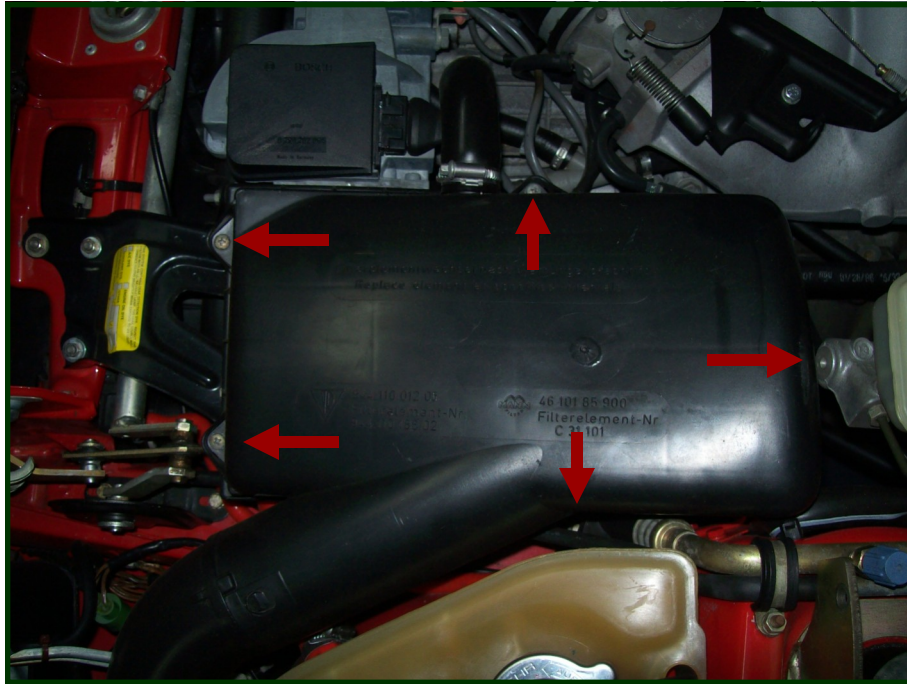
Step 16 - Make sure the chip and chip board are fully seated as shown above.



Step 17 - Re-assemble the DME using the reverse of steps for dis-assembly.



Step 18 - Re-install the DME in the car using the reverse steps for removal.



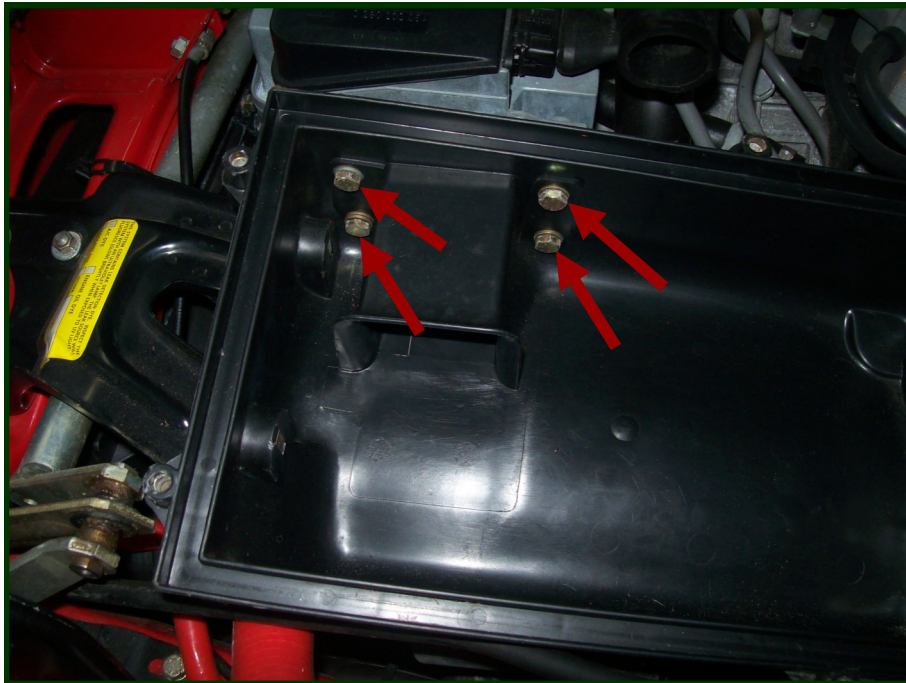
Step 19 - Remove the five phillips head screws holding the top air filter cover as shown above.



Step 20 - Loosen the hose clamp on the breather hose and remove the hose from the top air filter cover as shown above.



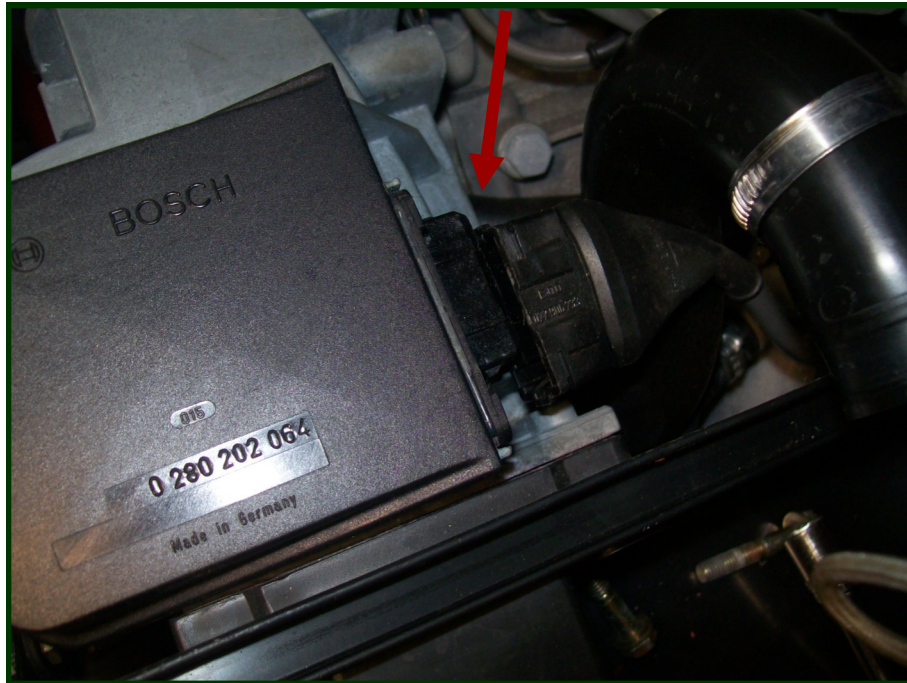
Step 21 - Remove the air filter. Note that this may be a good time to consider replacing the air filter with a new one.



Step 22 - Remove the four bolts shown above that fasten the filter housing to the AFM.



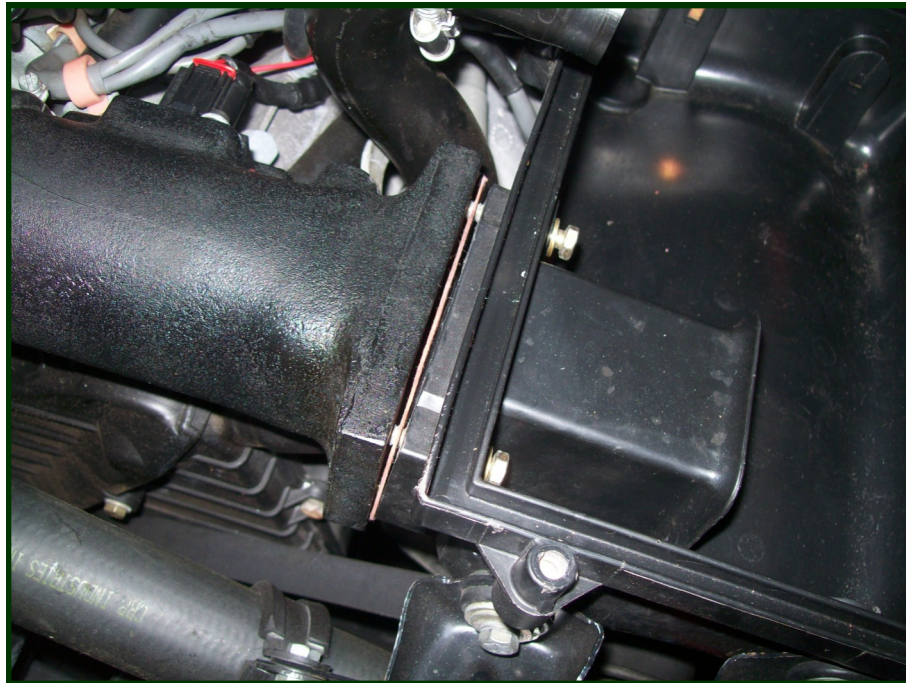
Step 23 - Loosen the clamp holding the J Boot to the AFM and remove the J Boot as shown above.



Step 24 - Remove the AFM connector as shown above.



Step 25 - Remove the AFM as it will no longer be needed.



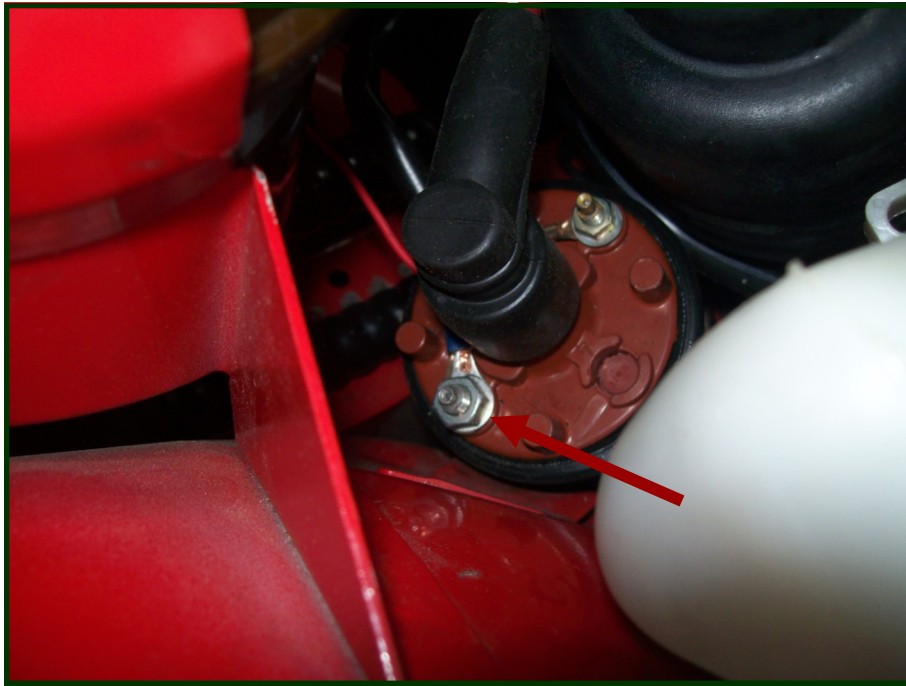
Step 26 - Install the NA-Tune MAF Assy as shown above. Make sure the mating surface are clean and also make sure to re-install the gasket. Torque the four bolts to 7.5 ft/lbs.



Step 27 - Make sure the filter housing is free of any debris and then re-install the filter as shown above.



Step 28 - Connect the NA-Tune MAF connector to the AFM connector as shown above.



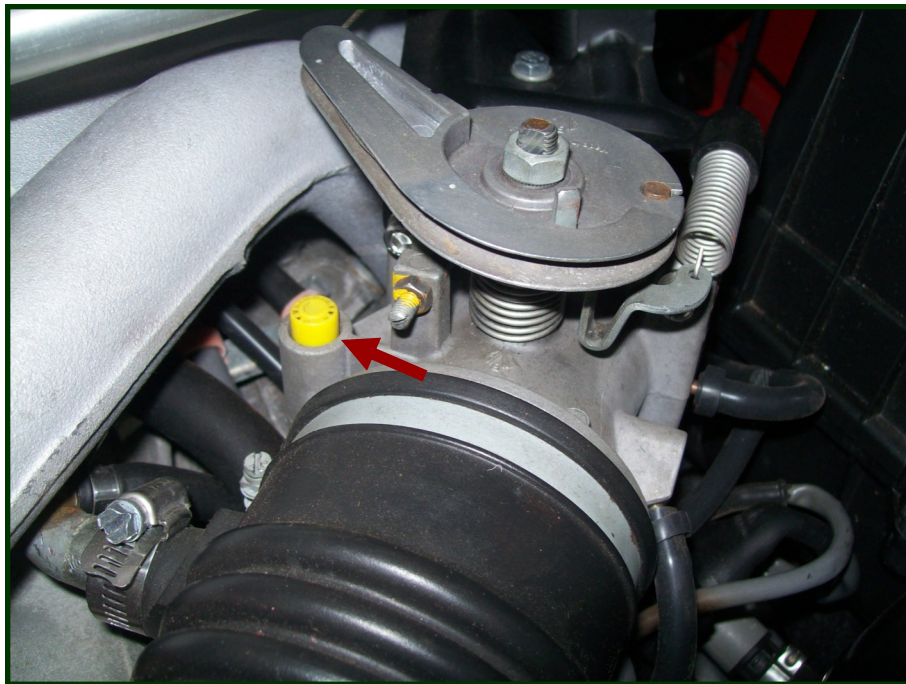
Step 29 - Remove the coil cover and install the MAF power wire (red wire) to the positive (+) side of the coil as shown above. **Caution:** DO NOT install the red wire to the negative side (-) of the coil or damage will occur. Also, route the power wire in a way to avoid the exhaust manifold and excessive heat.



Step 30 - Re-install the air filter top cover as shown above.



Step 31 - Re-connect the negative battery lead.



Step 32 - Generally the idle will need to be adjusted due to the MAF being less restrictive than the AFM. Idle set screw is shown above.